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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/656,969	09/07/2000	Dr. Yiming Zhou	282624US8X	2147

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EXAMINER

WIDHALM, ANGELA M

ART UNIT	PAPER NUMBER
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2152

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/08/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 09/656,969	Applicant(s) ZHOU, DR. YIMING	
	Examiner Angela Widhalm	Art Unit 2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 9-16 is/are rejected.
- 7) ☐ Claim(s) 6-8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 September 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is a final office action in response to remarks filed 13 November 2006. Claim 16 was amended and claim 17 was cancelled. No claims were added. The claims 1-16 are pending in this application.

Response to Arguments

2. Applicant's arguments filed 13 November 2006 have been fully considered but they are not persuasive.
3. Applicant argued that Gall did not teach a broadcast unit capable of transmitting requests to each other station identified in a trust list. Examiner respectfully disagrees. Gall disclosed a multicast router that broadcasted job requests to other computers and that if the request concerned any proprietary information, then the request would only be sent to a group of trusted computers (see col. 4 lines 35-39 and 55-62, col. 9 lines 1-9).
4. Applicant also argued that Gall did not teach each station being able to maintain its own trust list and to directly address other trusted stations. Examiner requests an explanation of where this is included in the claims. The preamble describes a structure in which multiple stations are interconnected in a network and that one station comprises the limitations described in the body of claim 1. The claim does not clearly indicate that each station maintains its own trust list. Examiner also requests a clearer explanation of what is meant by directly addressing other trusted stations. Gall

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disclosed sending a request to a group of trusted computers (see col. 9 lines 1-9) and this would require addressing the trusted stations.

5. Additionally, in the remarks filed 13 November 2006 on page 13 lines 6-10, applicant described a system in which there was no central point of failure, however, this concept is not clearly conveyed in the current set of claims.

6. Examiner maintains the previous rejection, which is repeated below.

7. The claimed invention relates to an apparatus and method (collectively referred to as 'system') that broadcasts job requests to other systems trusted by the requesting system. Before accepting or denying a job request, the system receiving the job request first determines the hardware resources on its system and the current usage of those resources. The system accepts or denies the job request based on this determination. In the same field of endeavor, the applied references teach the same.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1-3, 9-14, and 16 are rejected under 35 U.S.C. 102(e) as being unpatentable over Gall et al. (U.S. Patent 6,356,929), hereafter referred to as Gall.

10. Regarding claims 1 and 14, Gall disclosed a station for a network apparatus, said network apparatus comprising said station and a plurality of other stations, all interconnected in a network by a communication link (*see figure 2, col. 2 lines 31-34*), said station comprising:

a network connection (*Multiple computer systems may be networked together, see figure 1 #150 network interface, col. 5 lines 1-11, col. 7 lines 12-14*);

a self assessment module operable to determine a current status of said station, (*Before accepting a request, the computer receiving the request first determines if it has the resources to perform the job, see col. 9 lines 44-48*)

wherein said current status is a measure of available hardware resources of said station and (*Determining whether or not the computer is compatible, see col. 3 lines 64-66, col. 8 lines 10-15, col. 9 lines 7-9, 44-48*)

wherein said current status includes a determination of a dynamic status for said station based on current usage of said hardware resources of said station; (*Determining whether or not the computer has sufficient resources, e.g. memory, see col. 3 lines 64-66, col. 8 lines 10-15, col. 9 lines 7-9, 44-48*)

a trust list that includes a station identifier for each other station of said plurality of other stations which is designated as trusted to perform tasks for said station;

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(Security attributes limit the type of computers that may perform job requests. For instance, only computers in a certain department are trusted to perform the job requests even though computers in another department have the same capabilities, see col. 8 line 58 – col. 9 line 9. Additionally, only authorized computer systems are able to register, see col. 9 lines 14-21. The use of these security attributes to limit the type of computers performing job requests implies that there is a list containing information on which computers meet the requirements)

a broadcast unit operable to transmit service requests to said network connection and via said network, said service requests being directed to said each other station identified in said trust list and constituting a request to said each other station to perform a task for said station; *(The multicast router broadcasts job requests across the network to other computers, see col. 4 lines 35-39,55-62. Additionally, a request concerning proprietary information is only sent computers within the same company or department, col. 9 lines 1-9)*

an answer unit operable to receive service requests via said network through said network connection *(A computer is able to receive a job request sent via a network, see col. 4 lines 55-61)* and, in response thereto, to transmit via said network through said network connection an acceptance or refusal message in respect of said service request *(A computer receiving a job requests sends an acceptance message to the computer that send the job request, see col. 4 lines 63-64)*, said acceptance or refusal being decided based on said current status of said station, as determined by said self assessment module *(A computer only accepts a job request after determining if the*

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computer receiving the request has the resources to process the request, see col. 4 lines 63-64, col. 9 lines 44-48).

11. Regarding claim 2, Gall disclosed said self-assessment module is operable to determine a static status for said station based on said hardware resources of said station (*Determining whether or not the computer is compatible, see col. 3 lines 64-66, col. 8 lines 10-15, col. 9 lines 7-9, 44-48).*

12. Regarding claim 3, Gall disclosed a system security module operable to handle encryption between said station and each other trusted station (*Acceptance of a job request by a receiving computer is subject to certain security attributes, e.g. location of the receiving computer and password authorization, see col. 8 line 58 – col. 9 line 21).*

13. Regarding claim 9, Gall disclosed a task failure management module, operable to transmit to said network a failure message in response to failure of said station successfully to complete a task being performed for one of said other stations (*A user is able to abort job requests being performed on their computer. Once the jobs are aborted, the jobs must be restarted elsewhere. This implies that a failure notice is sent. See col. 5 lines 50-58).*

14. Regarding claim 10, Gall disclosed wherein said task failure management module is further operable to monitor for failure messages transmitted by one of its

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trusted stations and, in response thereto, to handle said failure message as said service request message for said failed task (*Because an aborted job must be restarted elsewhere, the aborted job becomes a new job request. It is also implied that some mechanism monitors for messages of aborted job requests. See col. 5 lines 50-58*).

15. Regarding claim 11, Gall disclosed a plurality of stations according to claim 1 interconnected by a communication link (*Multiple computer systems are coupled to an IP multicast router, see figure 2 col. 2 lines 31-34, col. 7 lines 38-45*).

16. Regarding claim 12, Gall disclosed there is no central server for said network (*Jobs may be shared between clients and servers, see figure 2, col. 7 lines 38-45, 50-58*).

17. Regarding claim 13, Gall disclosed said network operates to a protocol that permits stations to be removed from and added to said network dynamically (*Computers must first register in order to receive data, e.g. job requests, passed over the network. See col. 4 lines 35-43*).

18. Regarding claim 16, Gall disclosed a computer program storage medium storing program instructions, which when executed on a computer, cause the computer to perform the method according to claim 14 (see col. 7 lines 26-31).

Claim Rejections - 35 USC § 103

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20. Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gall as applied to claim 1 above, and further in view of Wydra et al. (U.S. Patent 6,598,067), hereafter referred to as Wydra.

21. Regarding claim 4, Gall disclosed the system, substantially as claimed, as described above in claim 1, but did not explicitly disclose a task execution, monitoring and reporting module operable to broadcast to said network progress updates on tasks accepted by and being performed in said station on behalf of an other station.

However, in a related art, Wydra disclosed displaying past, current, and future jobs and their respective statuses (see figures 10, 12, col. 12 line 42 – col. 13 line 8). It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the job scheduling details described by Wydra into Gall's system to provide further explanations on how to schedule shared jobs.

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22. Regarding claim 5, Gall disclosed the system, substantially as claimed, as described above in claim 1, but did not explicitly disclose a task scheduler module arranged to monitor all tasks being performed in said station.

However, in a related art, Wydra disclosed displaying past, current, and future jobs and their respective statuses (see figures 10, 12, col. 12 line 42 – col. 13 line 8). This implies the jobs are being monitored. It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the job scheduling details described by Wydra into Gall's system to provide further explanations on how to schedule shared jobs.

23. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gall, in view of what was well known in the art.

24. Regarding claim 15, Gall disclosed the system, substantially as claimed, as described above in claim 14, but did not explicitly disclose further distribution of the job request by the second station to other stations trusted by the second station.

However, Examiner takes Official Notice (see MPEP 2144.03 Reliance on "Well Known" Prior Art) that repeating sending a job request was well known and would have been obvious to one of ordinary skill in the art at the time of invention. Doing so would increase the productivity and efficiency of a system instead of requiring the second station to notify the first station of a job request and wait for the first station to receive a response from a third station regarding the job the second station requested.

Allowable Subject Matter

25. Claims 6-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

26. **Examiner's Note:** Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

27. **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing

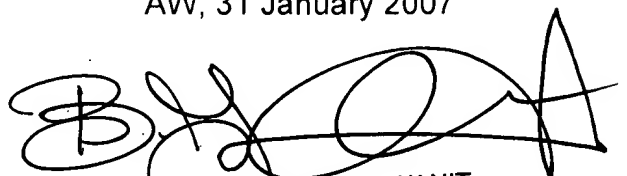
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date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

28. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angela Widhalm whose telephone number is (571) 272-1035. The examiner can normally be reached M-F, 9:00 am - 5:30 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on (571) 272-3913. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AW, 31 January 2007



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